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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,864	09/19/2001	Reinhard Doenges	1998DE503/Cont.	1612

25255 7590 03/19/2003

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EXAMINER

WHITE, EVERETT NMN 4

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 03/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,864

Applicant(s)

DOENGES ET AL.

Examiner

EVERETT WHITE

Art Unit

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/427,351.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 ✓
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 3, 4 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 4 recite the limitation "hydrophobically modified groups" in line 16 of Claim 3 and line 2 of Claim 4. There is insufficient antecedent basis for this limitation in the claims. What groups are the claims referring to as representative of "hydrophobically modified groups"? This lack of clarification renders the claims vague and indefinite.

Claim 10 provides for the use of a water soluble ionic cellulose ether in an emulsion paint, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
4. Claim 10 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Double Patenting

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claim 9 is rejected under 35 U.S.C. 101 as claiming the same invention as that of Claim 1 of prior U.S. Patent No. 6,313,287. This is a double patenting rejection.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kieseewetter et al (US Patent No. 5,358,561).

Applicants claim a water-soluble ionic cellulose ether comprising a hydroxy-alkylcelluloses having on average from 0.001 to 1.0 alkyl group per anhydroglucose unit substitutions and from 0.01 to 0.1 sulfoalkyl group per anhydroglucose unit, wherein the degree of hydroxyalkylation is greater than 2.3. An additional limitation in a dependent claim includes a formula of the cellulose ether.

The Kieseewetter et al patent discloses a water-soluble anionic cellulose derivative that have average degrees of substitution by sulphoethyl groups of 0.001 to 0.6, average degree of substitution by alkyl groups of 0.0001 to 2.5, average degree of substitution (MS) of compounds reacting with catalytic amounts of alkali (e.g. epoxides,

glycidyl ethers) ranging from 0.0001 to 5 (see column 2, last paragraph), which anticipates the degree of substitution of the alkyl, sulfoalkyl, and hydroxyalkylation groups for the water-soluble ionic cellulose ether disclosed in the instant claims.

The Kieseewetter et al patent further discloses the name of specific compounds that falls within the scope of the formula set forth in instant Claim 3. For example, the hydroxyethyl sulphoethyl cellulose which is disclosed in Example 1 of the Kieseewetter et al patent encompasses the formula set forth in Claim 3 by using a hydroxyethyl cellulose having a $MS = 2.5$ to prepare the hydroxyethyl sulphoethyl cellulose product. The above description of the water-soluble anionic cellulose derivative that is set forth in the Kieseewetter et al patent anticipates the water-soluble ionic cellulose ether of Claims 1-6.

8. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Kieseewetter et al (US Patent No. 5,358,561).

Applicants claim a process for preparing cellulose ether by etherifying cellulose with an etherifying agent from the group of alkylene oxides and etherifying with an alkyl halide or alkyl glycidyl ether and a sulfonate, with base catalysis.

In column 4, lines 10-26, the Kieseewetter et al patent discloses a process for preparing water-soluble sulfoalkyl derivatives of cellulose that involve (a) reacting cellulose with alkali in the presence of at least one etherification agent (such as sodium vinylsulphonate and/or ethylene oxide and/or n-butyl glycidyl ether) that requires at least a catalytic amount of a base; (b) optional further etherification with at least one etherification agent; (c) and optionally neutralization and work-up by extraction with aqueous-organic solvent mixtures or by hot water. This process description anticipates the claimed process set forth in instant Claim 7.

9. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Kieseewetter et al (US Patent No. 5,358,561).

Applicants claim a process for preparing cellulose ether as claimed in claim 1 by etherifying cellulose ethers from the group of hydroxyalkylcellulose with an alkyl halide or an alkyl glycidyl ether and a sulfonate, with base catalysis.

The example in the paragraph bridging column 7 and column 8 discloses preparation of hydroxyethyl sulphoethyl cellulose from hydroxyethyl cellulose. The hydroxyethyl cellulose is suspended in an aqueous solution comprising sodium vinylsulphonate. The mixture is agitated and alkalized by adding sodium hydroxide prills. Etherification occurs when this mixture is heated to 75°C for 60 minutes. This process description anticipates the claimed process set forth in instant Claim 8.

Summary

10. All the claims are rejected.

Examiner's Telephone Number, Fax Number, and Other Information

11. For 24 hour access to patent application information 7 days per week, or for filing applications, please visit our website at www.uspto.gov and click on the button "Patent Electronic Business Center" for more information.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is (703) 308-4621. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, can be reached on (703) 308-4624. The fax phone number for this Group is (703) 308-4556.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.


E. White


James O. Wilson
Supervisory Primary Examiner
Technology Center 1600